



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
|-----------------|-------------|----------------------|---------------------|------------------|

10/723,126

11/25/2003

Donald R. Gilbreath

C02-085A

9442

26683 7590 01/07/2011
THE GATES CORPORATION
IP LAW DEPT. 10-A3
1551 WEWATTA STREET
DENVER, CO 80202

EXAMINER

DUNWOODY, AARON M

ART UNIT

PAPER NUMBER

3679

MAIL DATE

DELIVERY MODE

01/07/2011

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | |
|------------------------------|--------------------------------------|---|--|
| Office Action Summary | Application No. 10/723,126 | Applicant(s) GILBREATH, DONALD R. | |
| | Examiner AARON DUNWOODY | Art Unit 3679 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 November 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

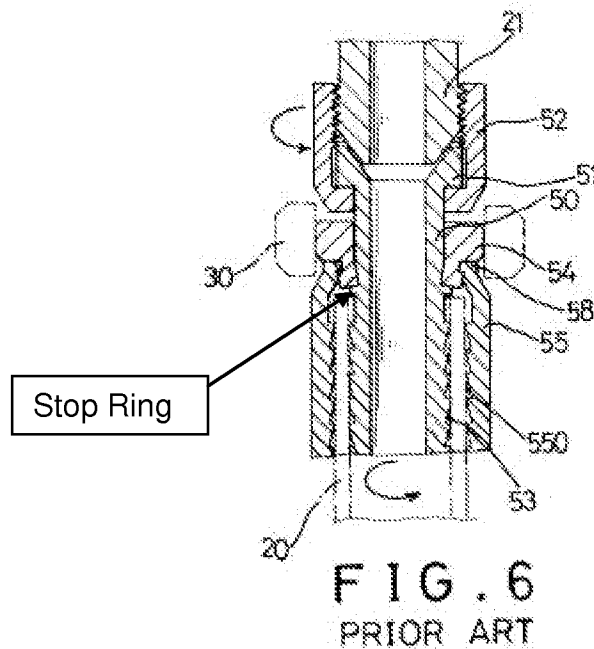
The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over US patent 6318763, Huang in view of US patent 2479499, Le Clair.

In regards to claims 1 and 2, Huang discloses an improved hydraulic fitting having a stem (50) including a hose insert portion (53), and a collar support portion, having a mating connection portion (50, 51), and a collar having (54), a torque communication portion, a female support portion, and an inner periphery having a non-threaded knurling mating surface extending through the ferrule support portion and the torque communication portion, the improvement comprising:

the collar support portion an axial stop ring (see Figure 6 below),



the torque communication portion of the collar staked in such a manner that the inner periphery non-threaded knurling mating surface extending through the torque communication portion communicates in a relatively non-rotational manner, and

the ferrule support portion of the collar staked in such a manner that the inner periphery extending through the ferrule support portion engages the axial stop ring in an axial movement limiting manner.

Huang teaches splines stem, but does not disclose the collar support portion including knurling. Le Clair teaches a collar support portion including knurling (6), “to provide improved couplings and improved methods for attaching couplings to hoses” (col. 1, lines 21-23). As Le Clair relates to coupling of the kind which comprises a ferrule at one end, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the collar support portion including knurling, to

Art Unit: 3679

provide improved couplings and improved methods for attaching couplings to hoses, as taught by Le Clair.

Note, the method of forming the device is not germane to the issue of patentability of the device itself. Therefore, this limitation is given little patentable weight.

In regards to claim 3, Huang discloses a ferrule (55) affixed upon the ferrule support portion.

In regards to claim 4, Huang in view of Le Clair discloses a hydraulic coupling and hose (20) comprising:

a hose end fitting including a stem having a hose insert portion, and a collar support portion,

the collar support portion of the stem including knurling and an axial stop ring,

a collar having, a torque communication portion, a female support portion, and an inner periphery having a non-threaded knurling mating surface extending through the ferrule support portion and the torque communication portion,

the torque communication portion of the collar staked such that the inner periphery non-threaded knurling mating surface extending through the torque communication portion communicates with the knurling in a relatively non-rotational manner, the ferrule support portion of the collar staked such that the inner periphery extending through the ferrule support portion engages the axial stop ring in an axial movement limiting manner, a mating connection portion, the hose fitted upon the hose end fitting,

an apparatus fitting, and

the apparatus fitting sealingly mated to the mating connection portion of the hose end fitting.

Note, the method of forming the device is not germane to the issue of patentability of the device itself. Therefore, the staking limitation is given little patentable weight.

In regards to claim 5, Huang discloses a ferrule staked upon the ferrule support portion and the hose crimped under the female.

Note, the method of forming the device is not germane to the issue of patentability of the device itself. Therefore, the crimping limitation is given little patentable weight.

Response to Arguments

Applicant's arguments filed 11/2/10 have been fully considered but they are not persuasive.

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Applicant argues that Huang teaches away from the supplantation of the structure shown in Prior Art Figure 6 with the structure shown in Figures 1-4. The Examiner disagrees. Simply that there are differences between two references is insufficient to establish that such references "teach away" from any combination thereof. In re

Art Unit: 3679

Beattie, 974 F.2d 1309, 1312-13, 24 USPQ2d 1040, 1042 (Fed. Cir. 1992). Huang

recites:

With reference to FIG. 6, a conventional high-pressure fluid hose connector is suggested to avoid the above-mentioned problem and difficulty. The conventional connector in FIG. 6 is similar to that in FIG. 5 except that the locking sleeve (54) is a separate piece instead of being integrally extended from the connecting pipe (50). With the conventional connector in FIG. 6, the locking flange (51) can be easily put into the upper sleeve (52) by inserting the

lower portion of the connecting pipe (50) through the upper sleeve (52) during installation. Then, the locking sleeve (54) and the lower sleeve (55) can be co-axially fit on the connecting pipe (50) and a press is applied on the locking edge (58) to lock the upper portion of the lower sleeve (55) into the lower portion of the locking sleeve (54). Afterward, the hose (20) is put into the gap between the connecting pipe (50) and the lower sleeve (55), and then a hydraulic press is used to press the lower sleeve (55) toward the connecting pipe (50) to lock the hose (20) between the gripping flanges (53) and (550). Subsequently, the upper sleeve (52) is connected to the union (21) while the locking sleeve (54) is locked by a tool such as a wrench (30).

However, relative rotation of the connecting pipe (50) to the locking sleeve (54) occurs due to the weak lock between the locking sleeve (54) and the connecting pipe (50) when the upper sleeve (52) is screwed onto the union (21). A problem of scraping the hose (20) occurs.

Huang does not teach away from the supplantation of the structure shown in Prior Art Figure 6 with the structure shown in Figures 1-4.

Applicant argues that Huang does not teach the collar support portion including knurling. The Examiner agrees. As Le Clair relates to coupling of the kind which comprises a ferrule at one end, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the collar support portion including knurling, to provide improved couplings and improved methods for attaching couplings to hoses, as taught by Le Clair.

Further, the Examiner is not substituting splines for knurling; the Examiner is incorporating/providing knurling into Huang's Prior Art Figure 6 to improve couplings and methods for attaching couplings to hoses.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to AARON DUNWOODY whose telephone number is (571)272-7080. The examiner can normally be reached on 7:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel P. Stodola can be reached on (571)272-7087. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3679

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/AARON DUNWOODY/
Primary Examiner, Art Unit 3679

.amd